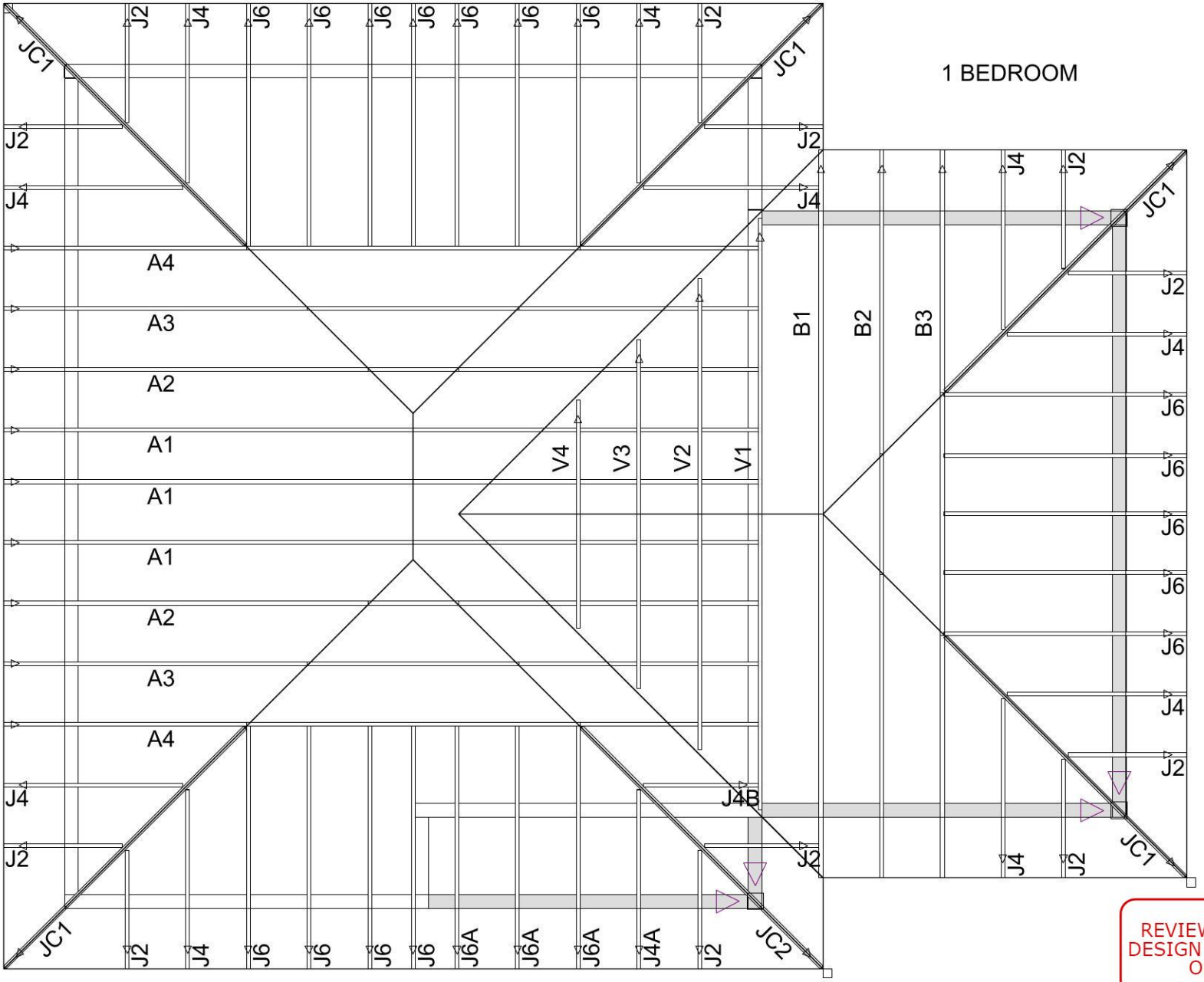


◁ Indicates left end of truss | Drawing is not to scale u.n.o. | Dashed walls indicate a non-bearing wall

BALLARD TRUSS

Client: Walk In - Mayer
Job Name: Home of my own
Job #: 105780
Location: , Prescott AZ

By signing below, I agree that I have reviewed this layout and the attached truss drawings and found them to be in conformance to my needs for this project, even if it they have deviated from the plans.

Signed:_____

Date:_____

Disclaimer: This Truss Placement Diagram was not created by an engineer, but rather by the Ballard Truss Staff and is purely to be used as an installation guide and does not require a seal. Complete truss engineering and analysis can be found on the Truss Design Drawings which may be sealed by the Truss Designer.

MiTek USA, Inc.
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661
Telephone 916-755-3571

Re: 105780
Yavapai County 1 Bedroom

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Ballard-Mesa,Snow.

Pages or sheets covered by this seal: R64673571 thru R64673589

My license renewal date for the state of Arizona is March 31, 2022.

Arizona COA: 11906-0

Lumber design values are in accordance with ANSI/TPI 1 section 6.3
These truss designs rely on lumber values established by others.

REVIEWED FOR DESIGN CRITERIA ONLY

December 8,2020

Dyer, Cecil

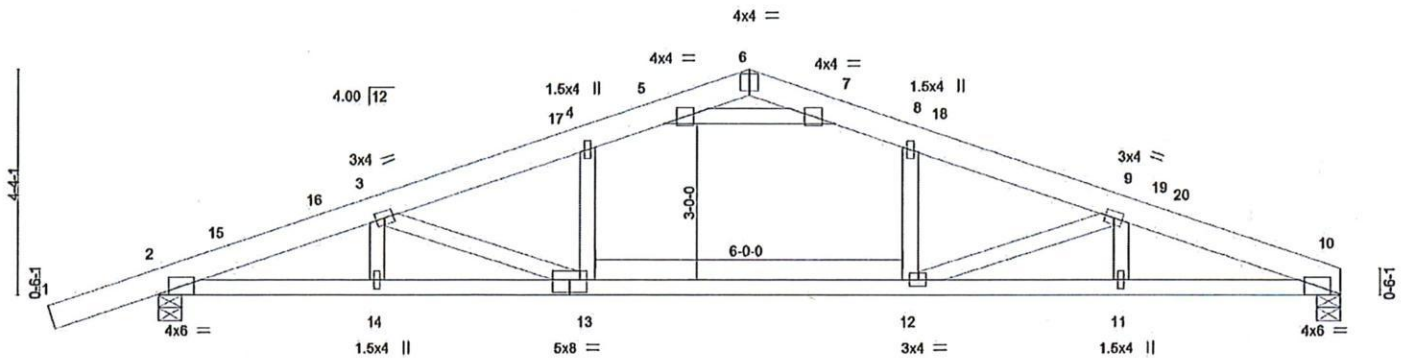
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	A1	Common	3	1	R64673571
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:37 2020 Page 1
ID:226jLByRO9ycucQLulq_87yB5JS-YarumXITyxcLcZTPpoSZz45eQGl2r8eFThP6l8yB4yG

-2-0-0	4-3-0	8-6-0	11-6-0	14-6-0	18-9-0	23-0-0
2-0-0	4-3-0	4-3-0	3-0-0	3-0-0	4-3-0	4-3-0

Scale = 1:41.1



4-3-0	8-6-0	14-6-0	18-9-0	23-0-0
4-3-0	4-3-0	6-0-0	4-3-0	4-3-0

Plate Offsets (X,Y)-- [2:0-2-6,Edge], [10:0-2-6,Edge], [13:0-3-12,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.34	11-12	>804	240	MT20	185/144
(Roof Snow=40.0)		Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.44	11-12	>612	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.10	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-SH							Weight: 100 lb	FT = 10%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-5-8, 2=0-5-8
Max Horz 2=95(LC 18)
Max Uplift 10=-97(LC 11), 2=-209(LC 10)
Max Grav 10=1502(LC 22), 2=1749(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3542/291, 3-4=-2697/221, 4-5=-2484/235, 7-8=-2478/242, 8-9=-2718/237, 9-10=-3684/362
BOT CHORD 2-14=-223/3236, 13-14=-223/3236, 12-13=-101/2486, 11-12=-290/3403, 10-11=-290/3403
WEBS 8-12=-5/431, 9-12=-1127/254, 4-13=0/387, 3-13=-973/210, 5-7=-2558/273

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 11-6-0, Exterior(2R) 11-6-0 to 15-0-0, Interior(1) 15-0-0 to 22-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) 150.0lb AC unit load placed on the top chord, 11-6-0 from left end, supported at two points, 3-0-0 apart.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 10 and 209 lb uplift at joint 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 8,2020

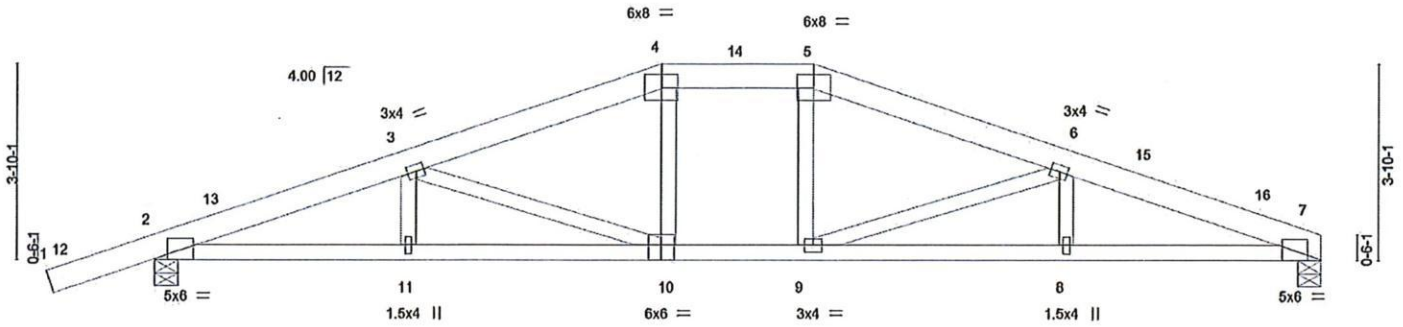
MiTek
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	A2	HIP	2	1	R64673572
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:39 2020 Page 1
ID:226jLByRO9ycucQLulq_87yB5JS-VzzeBDKkUYs2ssdnxDV12VA2w4RsJ1aXx?uCp1yB4yE

-2-0-0	5-0-0	10-0-0	13-0-0	18-0-0	23-0-0
2-0-0	5-0-0	5-0-0	3-0-0	5-0-0	5-0-0

Scale = 1:41.7



5-0-0	10-0-0	13-0-0	18-0-0	23-0-0
5-0-0	5-0-0	3-0-0	5-0-0	5-0-0

Plate Offsets (X,Y)-- [2:0-3-2,Edge], [7:0-3-2,Edge], [10:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.23	8-9	>999	240	MT20	185/144
(Roof Snow=40.0)		Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.31	8-9	>861	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.12	7	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-SH							Weight: 100 lb	FT = 10%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-2-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-10-12 oc bracing.

REACTIONS. (size) 7=0-5-8, 2=0-5-8
Max Horz 2=86(LC 14)
Max Uplift 7=-183(LC 11), 2=-295(LC 10)
Max Grav 7=1738(LC 35), 2=2119(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3846/595, 3-4=-2852/500, 4-5=-2613/508, 5-6=-2857/509, 6-7=-3984/610
BOT CHORD 2-11=-510/3469, 10-11=-510/3469, 9-10=-346/2613, 8-9=-528/3647, 7-8=-528/3647
WEBS 3-10=-1010/186, 4-10=-4/405, 5-9=-22/445, 6-9=-1155/221

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 10-0-0, Exterior(2E) 10-0-0 to 18-0-0, Exterior(2R) 13-0-0 to 18-0-0, Interior(1) 18-0-0 to 22-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 183 lb uplift at joint 7 and 295 lb uplift at joint 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 8,2020

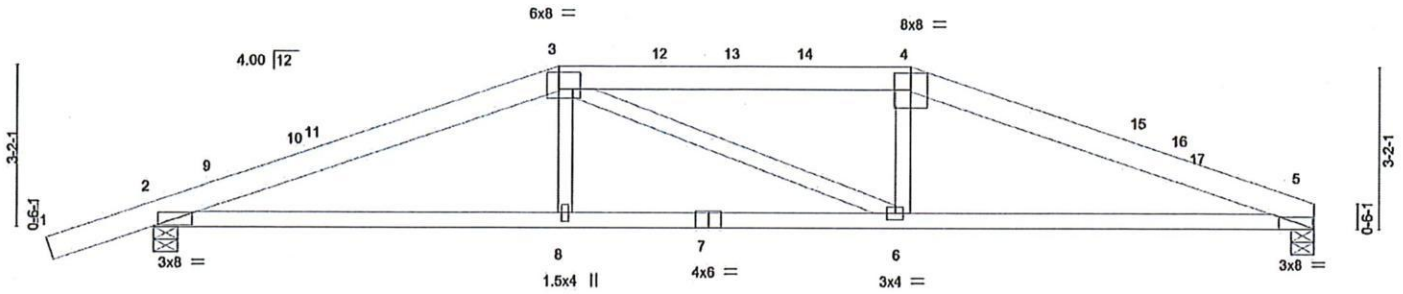
MiTek
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	A3	HIP	2	1	R64673573
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:40 2020 Page 1
ID:226|LByRO9ycucQLulq_87yB5JS-z9X0OZLMFs?vT0C_Uw0Galj6GTI?2aah9eemMTyB4yD

-2-0-0	8-0-0	15-0-0	23-0-0
2-0-0	8-0-0	7-0-0	8-0-0

Scale = 1:41.9



8-0-0	15-0-0	23-0-0
8-0-0	7-0-0	8-0-0

Plate Offsets (X,Y)-- [3:0-5-4,0-4-0], [5:0-0-6,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.20	5-6	>999	240	MT20	185/144
(Roof Snow=40.0)		Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.33	5-6	>822	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.09	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-SH							Weight: 89 lb	FT = 10%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-2-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-5-8, 2=0-5-8
Max Horz 2=73(LC 14)
Max Uplift 5=-195(LC 11), 2=-307(LC 10)
Max Grav 5=1527(LC 35), 2=1907(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3139/563, 3-4=-2893/578, 4-5=-3177/568
BOT CHORD 2-8=-451/2822, 6-8=-447/2830, 5-6=-448/2892
WEBS 3-8=0/293, 3-6=-320/418, 4-6=0/292

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 8-0-0, Exterior(2R) 8-0-0 to 12-11-0, Interior(1) 12-11-6 to 15-0-0, Exterior(2R) 15-0-0 to 19-11-6, Interior(1) 19-11-6 to 22-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 195 lb uplift at joint 5 and 307 lb uplift at joint 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 8,2020

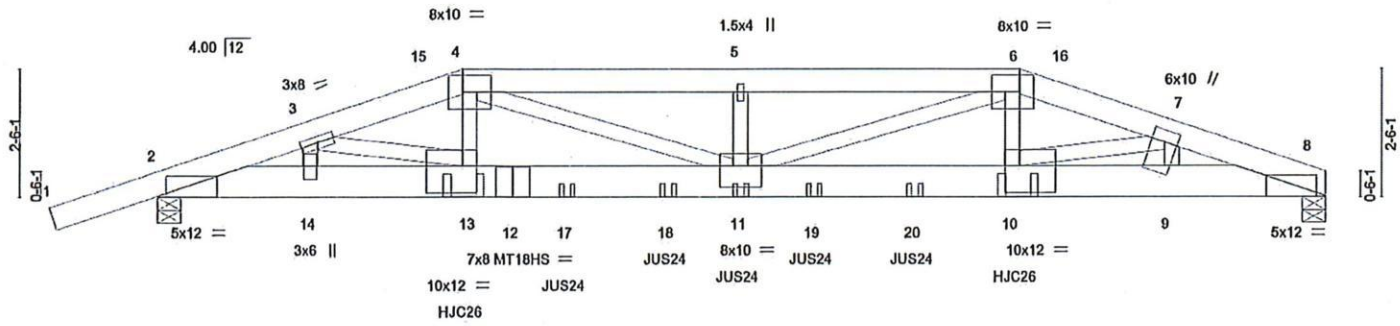
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	A4	GIRDER	2	1	R64673574
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:42 2020 Page 1
ID:226jLByRO9ycucQLulq_87yB5JS-vYfnpFMcnTFdjKMMcL2kg7oQwHSLWND_dy7tQLyB4yB

-2-0-0	3-0-0	6-0-0	11-6-0	17-0-0	20-0-0	23-0-0
2-0-0	3-0-0	3-0-0	5-6-0	5-6-0	3-0-0	3-0-0

Scale = 1:41.6



3-0-0	6-0-0	11-6-0	17-0-0	20-0-0	23-0-0
3-0-0	3-0-0	5-6-0	5-6-0	3-0-0	3-0-0

Plate Offsets (X,Y)-- [2:0-2-0,Edge], [4:0-6-12,0-4-0], [6:0-6-12,0-4-0], [7:0-2-12,0-3-0], [8:0-2-0,Edge], [10:0-3-8,0-6-4], [11:0-5-0,0-5-0], [13:0-3-8,0-6-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.50	11	>544	240	MT20	185/144
(Roof Snow=40.0)		Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.66	11	>410	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.11	8	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-SH							Weight: 144 lb	FT = 10%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SPF 2100F 1.8E
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud *Except*
4-11,6-11: 2x4 SPF 1650F 1.5E

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-11-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-5-8, 2=0-5-8
Max Horz 2=69(LC 46)
Max Uplift 8=-496(LC 7), 2=-608(LC 6)
Max Grav 8=3447(LC 18), 2=3694(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-8256/1098, 3-4=-9800/1378, 4-5=-11883/1700, 5-6=-11883/1700, 6-7=-9887/1426, 7-8=-8456/1210
BOT CHORD 2-14=-1029/7708, 13-14=-1029/7708, 11-13=-1284/9418, 10-11=-1305/9502, 9-10=-1112/7912, 8-9=-1112/7912
WEBS 3-14=-883/192, 3-13=-254/1815, 4-13=-161/1604, 4-11=-405/2617, 5-11=-734/216, 6-11=-385/2586, 6-10=-182/1669, 7-10=-249/1757, 7-9=-825/162

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 496 lb uplift at joint 8 and 608 lb uplift at joint 2.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 10-11-4 oc max. starting at 6-0-6 from the left end to 16-11-10 to connect truss(es) to front face of bottom chord.
13) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 8-0-12 from the left end to 14-11-4 to connect truss(es) to front face of bottom chord.

Continued on page 2

REVIEWED FOR DESIGN CRITERIA ONLY

Registered Professional Engineer (Civil) CERTIFICATE NO. 68443 CECIL DYER Date Signed ARIZONA U.S.A. Expires 03/31/2022

December 8,2020

MiTek
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

NOTES-

14) Fill all nail holes where hanger is in contact with lumber.
15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-100, 4-6=-100, 6-8=-100, 2-8=-20
   Concentrated Loads (lb)
   Vert: 13=-945(F) 11=-407(F) 10=-945(F) 17=-407(F) 18=-407(F) 19=-407(F) 20=-407(F)

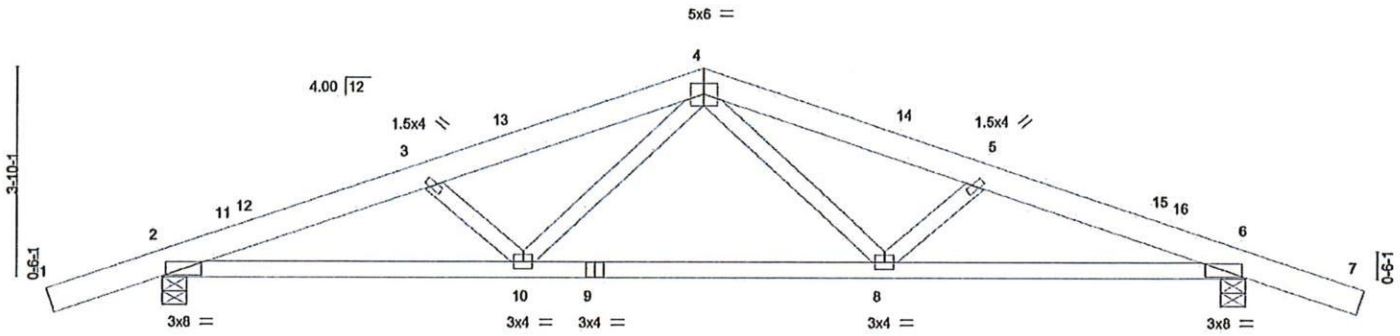
REVIEWED FOR DESIGN CRITERIA ONLY

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	B1	COMMON	1	1	R64673575
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:43 2020 Page 1
ID:226jLByRO9ycucQLulq_87yB5JS-NkC91bNEYnNUKUxZA2ZzCLLkvhrzFxV7rcsQyoyB4yA

-2-0-0 | 5-0-0 | 10-0-0 | 15-0-0 | 20-0-0 | 22-0-0
2-0-0 | 5-0-0 | 5-0-0 | 5-0-0 | 5-0-0 | 2-0-0

Scale = 1:38.9



6-8-0 | 13-4-0 | 20-0-0
6-8-0 | 6-8-0 | 6-8-0

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 40.0	Plate Grip DOL 1.15	TC 0.28	Vert(LL) -0.11 8-10 >999 240	MT20 185/144
(Roof Snow=40.0)	Lumber DOL 1.15	BC 0.47	Vert(CT) -0.19 8-10 >999 180	
TCDL 10.0	Rep Stress Incr YES	WB 0.33	Horz(CT) 0.06 6 n/a n/a	
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-SH		Weight: 87 lb FT = 10%
BCDL 10.0				

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-5-8, 6=0-5-8
Max Horz 2=75(LC 18)
Max Uplift 2=-260(LC 10), 6=-260(LC 11)
Max Grav 2=1521(LC 21), 6=1521(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2795/439, 3-4=-2294/377, 4-5=-2294/376, 5-6=-2795/438
BOT CHORD 2-10=-324/2525, 8-10=-181/1613, 6-8=-344/2525
WEBS 4-8=-52/766, 5-8=-626/176, 4-10=-51/766, 3-10=-626/175

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 10-0-0, Exterior(2R) 10-0-0 to 13-6-0 Interior(1) 13-6-0 to 22-0-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 260 lb uplift at joint 2 and 260 lb uplift at joint 6.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

REVIEWED FOR DESIGN CRITERIA ONLY

Registered Professional Engineer (Civil) CERTIFICATE NO. 68443 CECIL DYER Date Signed ARIZONA U.S.A. Expires 03/31/2022

December 8,2020

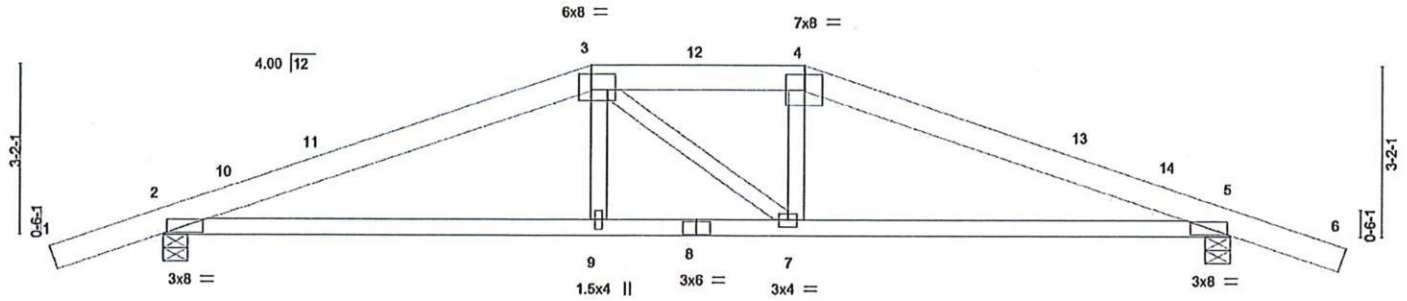
MiTek
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	B2	HIP	1	1	R64673576
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:44 2020 Page 1
ID:226jLByRO9ycucQLulq_87yB5JS-rwmXEwOsJ5VLyeWljm4ClYuqK59K_RhH4GczVEyB4y9

-2-0-0 / 2-0-0 | 8-0-0 / 8-0-0 | 12-0-0 / 4-0-0 | 20-0-0 / 8-0-0 | 22-0-0 / 2-0-0

Scale = 1:39.6



8-0-0 / 8-0-0 | 12-0-0 / 4-0-0 | 20-0-0 / 8-0-0

Plate Offsets (X,Y)-- [3:0-5-4,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.14	2-9	>999	240	MT20	185/144
(Roof Snow=40.0)		Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.26	2-9	>912	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.07	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-SH							Weight: 81 lb	FT = 10%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-5-8, 5=0-5-8
Max Horz 2=63(LC 14)
Max Uplift 2=-274(LC 10), 5=-274(LC 11)
Max Grav 2=1793(LC 35), 5=1793(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2524/476, 3-4=-2194/522, 4-5=-2527/499
BOT CHORD 2-9=-334/2184, 7-9=-331/2191, 5-7=-367/2187
WEBS 3-7=-314/321, 4-7=-47/293

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 8-0-0, Exterior(2E) 8-0-0 to 11-0-0, Exterior(2R) 12-0-0 to 16-11-6, Interior(1) 16-11-6 to 22-0-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 274 lb uplift at joint 2 and 274 lb uplift at joint 5.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

REVIEWED FOR DESIGN CRITERIA ONLY

Registered Professional Engineer (Civil) CERTIFICATE NO. 68443 CECIL DYER Date Signed ARIZONA U.S.A. Expires 03/31/2022

December 8,2020

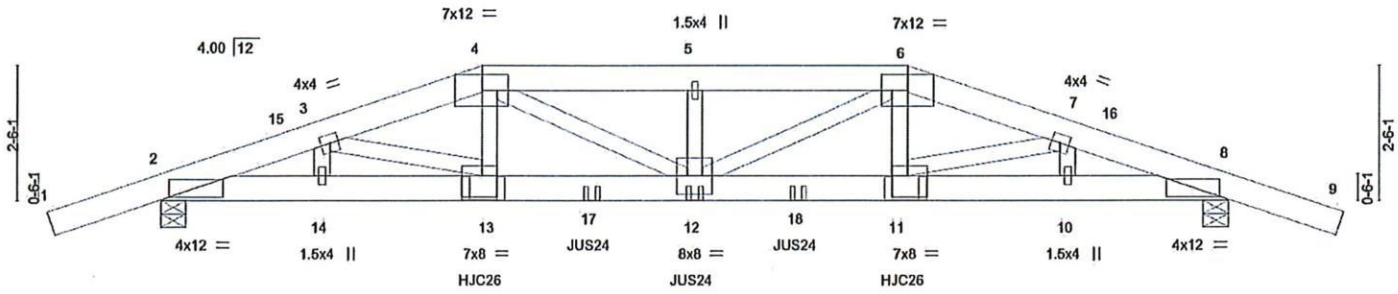
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	B3	Hip Girder	1	1	R64673577
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:46 2020 Page 1
ID:226jLByRO9ycucQLulq_87yB5JS-oJuHfcP7qll3Bxf8rB7gqzzCduowSEeZYa54Z7yB4y7

-2-0-0	3-0-0	6-0-0	10-0-0	14-0-0	17-0-0	20-0-0	22-0-0
2-0-0	3-0-0	3-0-0	4-0-0	4-0-0	3-0-0	3-0-0	2-0-0

Scale = 1:39.6



3-0-0	6-0-0	10-0-0	14-0-0	17-0-0	20-0-0
3-0-0	3-0-0	4-0-0	4-0-0	3-0-0	3-0-0

Plate Offsets (X,Y)-- [11:0-3-8,0-4-12], [13:0-3-8,0-4-12]

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.15	TC 0.51	Vert(LL)	-0.33	12	>717	240	MT20	185/144
(Roof Snow=40.0)	Lumber DOL 1.15	BC 0.71	Vert(CT)	-0.44	12	>536	180		
TCDL 10.0	Rep Stress Incr NO	WB 0.62	Horz(CT)	0.10	8	n/a	n/a		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-SH						Weight: 108 lb	FT = 10%
BCDL 10.0									

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x6 SPF 2100F 1.8E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-9-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-5-8, 8=0-5-8
Max Horz 2=-51(LC 7)
Max Uplift 2=-511(LC 6), 8=-511(LC 7)
Max Grav 2=3137(LC 31), 8=3137(LC 31)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6773/849, 3-4=-7491/1020, 4-5=-8241/1157, 5-6=-8241/1157, 6-7=-7491/1021, 7-8=-6773/852
BOT CHORD 2-14=-769/6249, 13-14=-769/6249, 12-13=-921/7183, 11-12=-888/7183, 10-11=-737/6249, 8-10=-737/6249
WEBS 3-14=-385/117, 3-13=-179/1089, 4-13=-119/1227, 4-12=-221/1451, 5-12=-502/157, 6-12=-221/1451, 6-11=-120/1227, 7-11=-181/1089, 7-10=-385/116

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 511 lb uplift at joint 2 and 511 lb uplift at joint 8.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 7-11-4 oc max. starting at 6-0-6 from the left end to 13-11-10 to connect truss(es) to front face of bottom chord.
12) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 1-11-4 oc max. starting at 8-0-12 from the left end to 11-11-4 to connect truss(es) to front face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

REVIEWED FOR DESIGN CRITERIA ONLY

Registered Professional Engineer (Civil) CERTIFICATE NO. 68443 CECIL DYER Date Signed ARIZONA U.S.A. Expires 03/31/2022

December 8,2020

Continued on page 2

MiTek
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	B3	Hip Girder	1	1	R64673577 Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:46 2020 Page 2
ID:226JLByRO9ycucQLulq_87yB5JS-oJuHfcP7qll3Bxf8rB7gqzzCduowSEeZYa54Z7yB4y7

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-100, 4-6=-100, 6-9=-100, 2-8=-20
   Concentrated Loads (lb)
   Vert: 13=-945(F) 12=-407(F) 11=-945(F) 17=-407(F) 18=-407(F)

REVIEWED FOR DESIGN CRITERIA ONLY

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	J2	Jack-Open	12	1	R64673578
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:47 2020 Page 1
ID:226jLByRO9ycucQLulq_87yB5JS-GVSgsyQlb0lwp5EKPuevNBVRclJqBqejmEqd5ZyB4y6

-2-0-0 / 2-0-0 | 1-10-15 / 1-10-15

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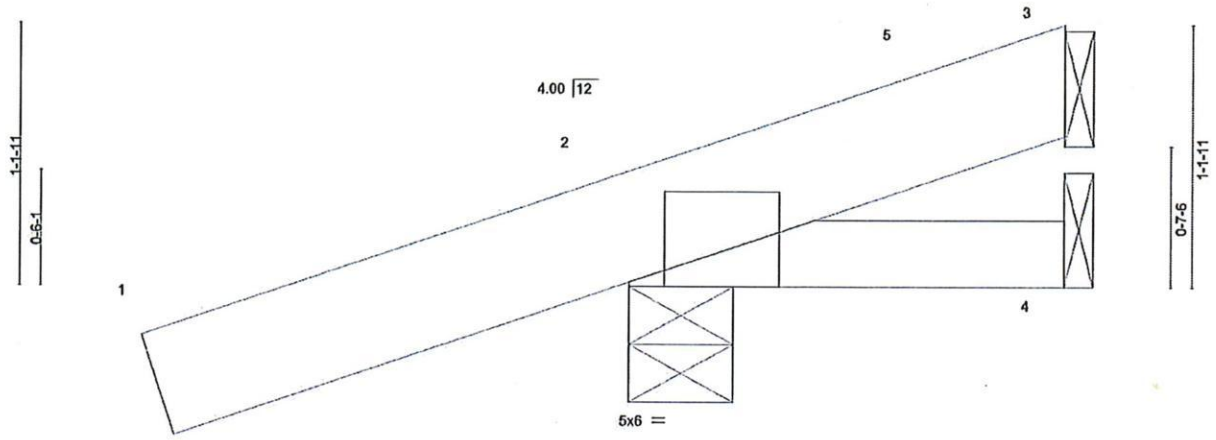

1-10-15 / 1-10-15

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.00	2	>999	240	MT20	197/144
(Roof Snow=40.0)		Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	2-4	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P							Weight: 10 lb	FT = 10%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-5-8, 4=Mechanical
Max Horz 2=66(LC 10)
Max Uplift 3=-199(LC 20), 2=-168(LC 10)
Max Grav 3=25(LC 10), 2=636(LC 20), 4=37(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 1-10-13 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 199 lb uplift at joint 3 and 168 lb uplift at joint 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

REVIEWED FOR DESIGN CRITERIA ONLY

Registered Professional Engineer (Civil) CERTIFICATE NO. 68443 CECIL DYER Date Signed ARIZONA U.S.A. Expires 03/31/2022

December 8,2020

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	J4	Jack-Open	10	1	R64673579
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:47 2020 Page 1
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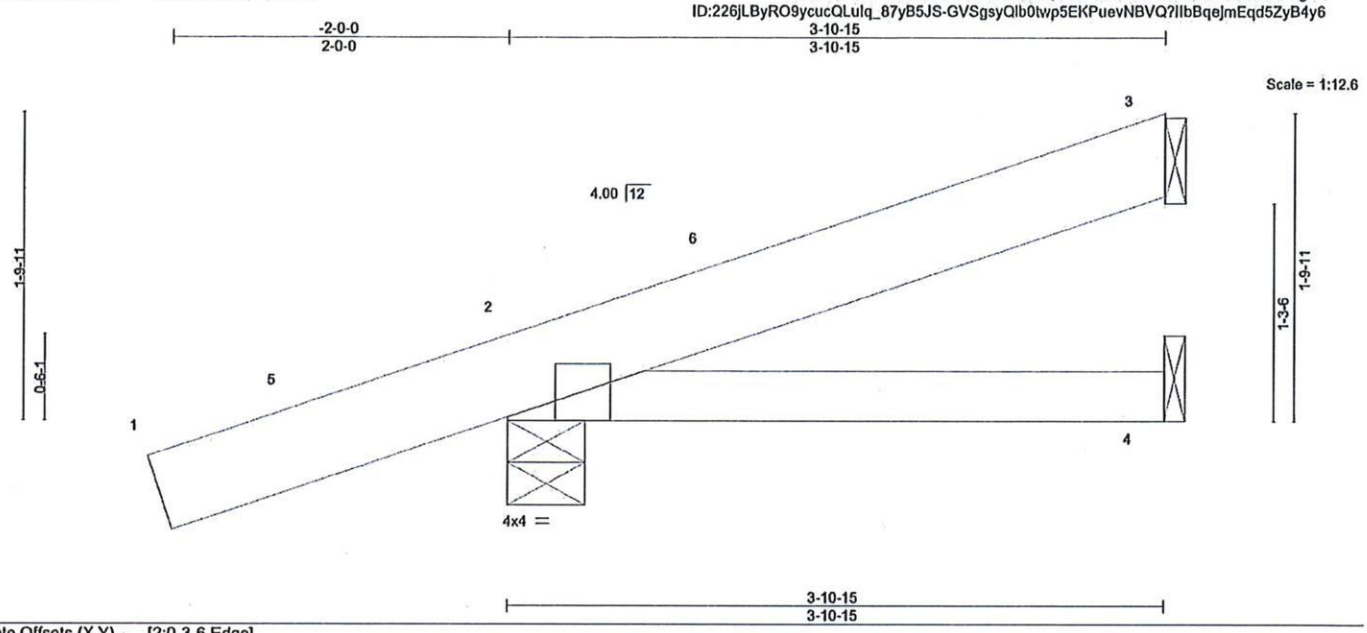

Plate Offsets (X,Y)-- [2:0-3-6,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.01	2-4	>999	240	MT20	197/144
(Roof Snow=40.0)		Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.02	2-4	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 lb	FT = 10%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-5-8, 4=Mechanical
Max Horz 2=94(LC 10)
Max Uplift 3=-96(LC 20), 2=-164(LC 10)
Max Grav 3=154(LC 21), 2=726(LC 21), 4=72(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 3-10-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 3 and 164 lb uplift at joint 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

REVIEWED FOR DESIGN CRITERIA ONLY

Registered Professional Engineer (Civil)
CERTIFICATE NO.
68443
CECIL DYER
Date Signed
ARIZONA U.S.A.
Expires 03/31/2022

December 8,2020

MiTek
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	J4A	Jack-Open	1	1	R64673580
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:48 2020 Page 1
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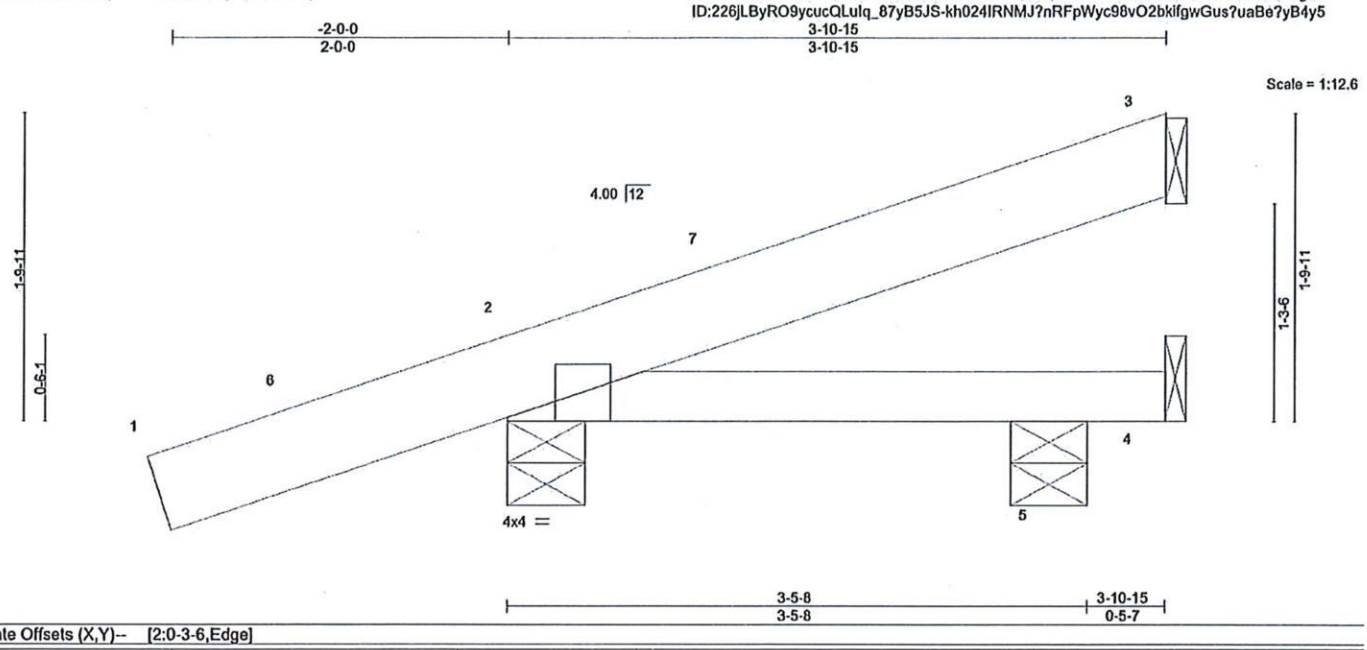


Plate Offsets (X,Y)-- [2:0-3-6,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.00	2-5	>999	240	MT20	197/144
(Roof Snow=40.0)		Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	2-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 lb	FT = 10%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-5-8, 4=Mechanical, 5=0-5-8
Max Horz 2=94(LC 10)
Max Uplift 3=-96(LC 20), 2=-172(LC 10), 4=-48(LC 5)
Max Grav 3=154(LC 21), 2=714(LC 21), 5=146(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 3-10-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 3, 172 lb uplift at joint 2 and 48 lb uplift at joint 4.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

REVIEWED FOR DESIGN CRITERIA ONLY

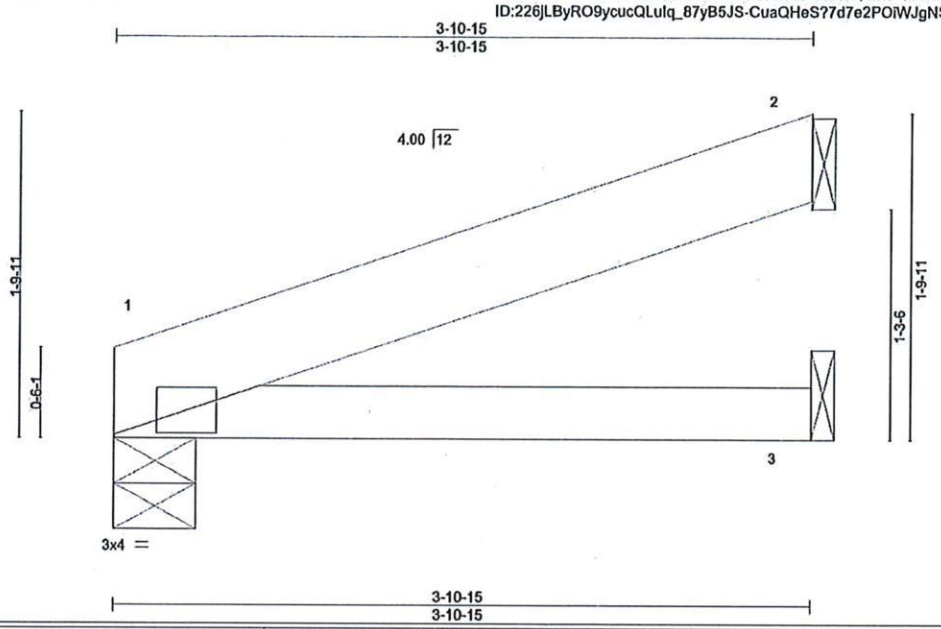
Registered Professional Engineer (Civil) CERTIFICATE NO. 68443 CECIL DYER Date Signed ARIZONA U.S.A. Expires 03/31/2022

December 8,2020

MiTek
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	J4B	Jack-Open	1	1	R64673581
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:49 2020 Page 1
ID:226JLByRO9ycucQLulq_87yB5JS-CuaQHeS?7d7e2POiWJgNScboe6_3fj80EYJkASyB4y4



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.01	1-3	>999	240	MT20	197/144
(Roof Snow=40.0)		Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.02	1-3	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P							Weight: 12 lb	FT = 10%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-5-8, 2=Mechanical, 3=Mechanical
Max Horz 1=61(LC 10)
Max Uplift 1=-23(LC 10), 2=-68(LC 10)
Max Grav 1=282(LC 20), 2=246(LC 20), 3=72(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 1 and 68 lb uplift at joint 2.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

REVIEWED FOR DESIGN CRITERIA ONLY

Registered Professional Engineer (Civil) CERTIFICATE NO. 68443 CECIL DYER Date Signed ARIZONA U.S.A. Expires 03/31/2022

December 8,2020

MiTek
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	J6	Jack-Closed	16	1	R64673582
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:50 2020 Page 1
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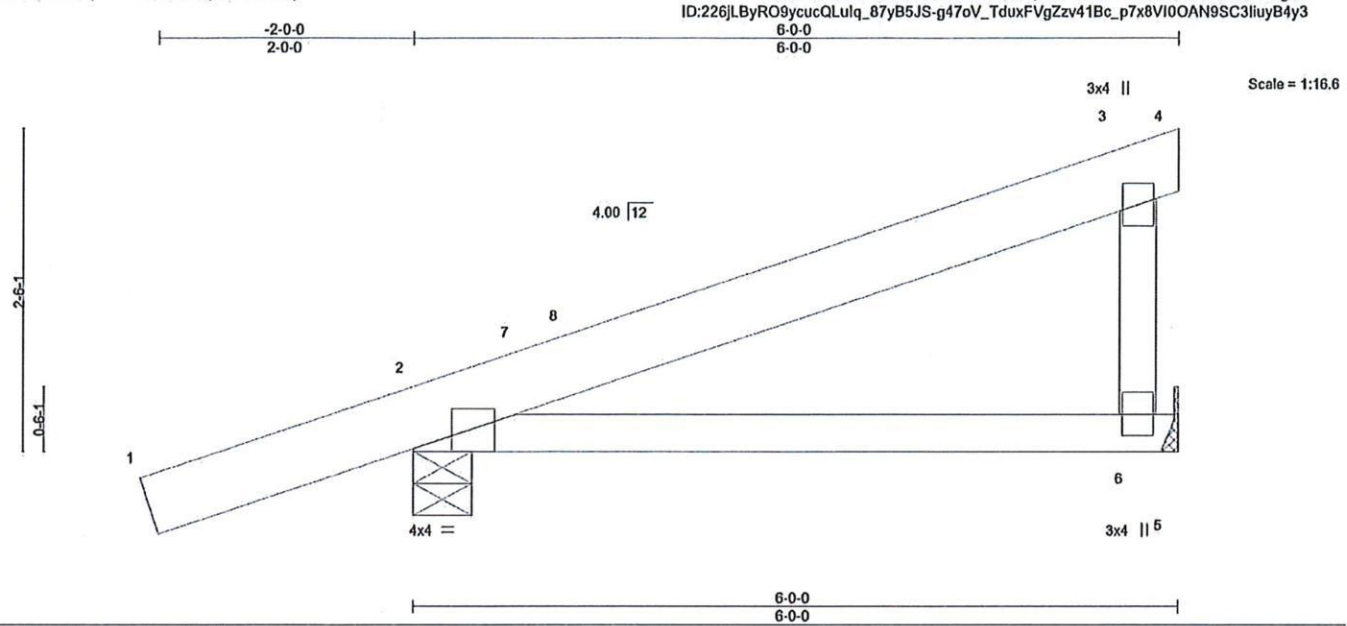

Plate Offsets (X,Y)-- [2:0-3-10,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.05	2-6	>999	240	MT20	185/144
(Roof Snow=40.0)		Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.10	2-6	>664	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 lb	FT = 10%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=Mechanical, 2=0-5-8
Max Horz 2=113(LC 11)
Max Uplift 6=-53(LC 14), 2=-172(LC 10)
Max Grav 6=427(LC 21), 2=839(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-6=-366/245

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 6-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 6 and 172 lb uplift at joint 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

REVIEWED FOR DESIGN CRITERIA ONLY

Registered Professional Engineer (Civil) CERTIFICATE NO. 68443 CECIL DYER Date Signed ARIZONA U.S.A. Expires 03/31/2022

December 8,2020

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	J6A	Jack-Closed	3	1	R64673583 Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:51 2020 Page 1
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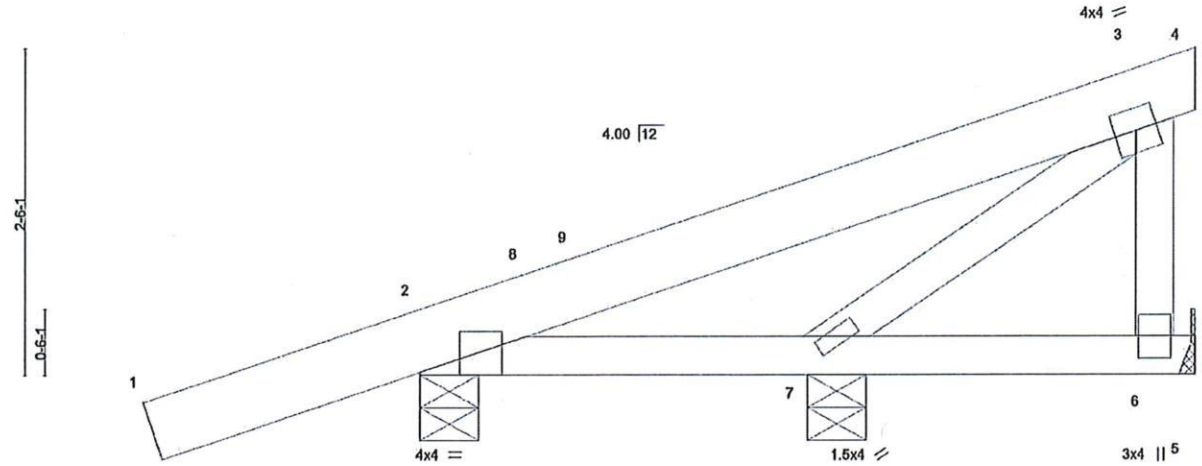

3-2-12 6-0-0
3-2-12 2-9-4

Plate Offsets (X,Y)-- [2:0-3-10,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.00	2-7	>999	240	MT20	185/144
(Roof Snow=40.0)		Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	2-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	-0.00	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P							Weight: 29 lb	FT = 10%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=Mechanical, 2=0-5-8, 7=0-5-8
Max Horz 2=113(LC 11)
Max Uplift 6=-76(LC 14), 2=-194(LC 10)
Max Grav 6=380(LC 21), 2=794(LC 21), 7=139(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-6=-353/250

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 6-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 6 and 194 lb uplift at joint 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

REVIEWED FOR DESIGN CRITERIA ONLY

Registered Professional Engineer (Civil) CERTIFICATE NO. 68443 CECIL DYER Date Signed ARIZONA U.S.A. Expires 03/31/2022

December 8,2020

MiTek
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	JC1	MONO GIRDER	5	1	R64673584
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:52 2020 Page 1
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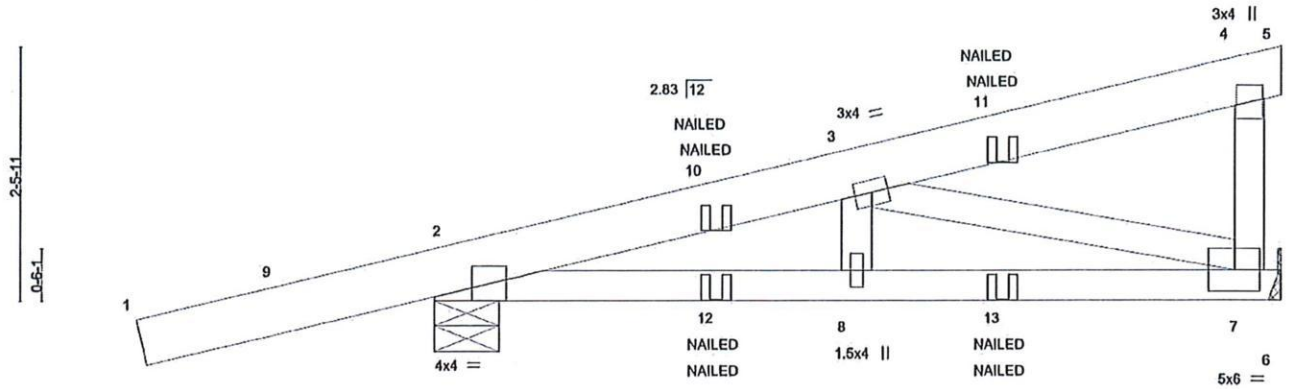

4-2-3 / 4-2-3 | 8-4-5 / 4-2-2

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	In	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0 (Roof Snow=40.0)	Plate Grip DOL 1.15	TC 0.62	Vert(LL)	-0.02	8	>999	240	MT20	185/144
TCDL 10.0	Lumber DOL 1.15	BC 0.20	Vert(CT)	-0.03	7-8	>999	180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.28	Horz(CT)	0.01	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P						Weight: 39 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 7=Mechanical, 2=0-7-12
Max Horz 2=106(LC 7)
Max Uplift 7=-47(LC 10), 2=-202(LC 6)
Max Grav 7=567(LC 17), 2=1014(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-862/253, 4-7=-331/73
BOT CHORD 2-8=-320/725, 7-8=-320/725
WEBS 3-7=-754/333

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 7 and 202 lb uplift at joint 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-100, 4-5=-100, 2-6=-20

REVIEWED FOR DESIGN CRITERIA ONLY

Registered Professional Engineer (Civil) CERTIFICATE NO. 68443 CECIL DYER Date Signed ARIZONA U.S.A. Expires 03/31/2022

December 8,2020

Continued on page 2

MiTek
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	JC1	MONO GIRDER	5	1	R64673584 Job Reference (optional)

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 10=68(F=34, B=34) 11=-38(F=-19, B=-19) 13=-16(F=-8, B=-8)

REVIEWED FOR DESIGN CRITERIA ONLY

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	JC2	MONO GIRDER	1	1	R64673585
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:53 2020 Page 1
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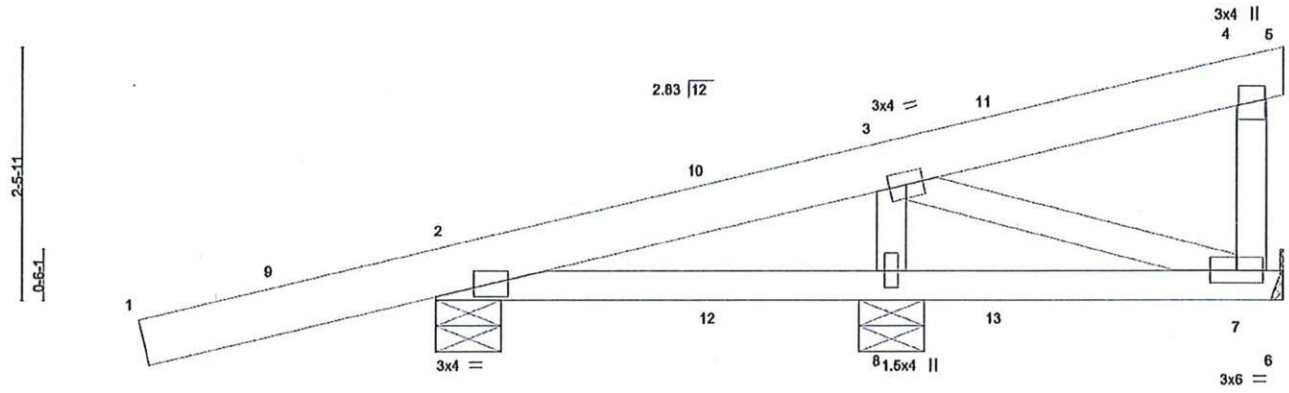


4-6-1 / 4-6-1 | 8-4-5 / 3-10-4

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.15	TC 0.60	Vert(LL)	-0.01	2-8	>999	240	MT20	185/144
(Roof Snow=40.0)	Lumber DOL 1.15	BC 0.10	Vert(CT)	-0.02	2-8	>999	180		
TCDL 10.0	Rep Stress Incr NO	WB 0.12	Horz(CT)	-0.00	7	n/a	n/a		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-P						Weight: 38 lb	FT = 10%
BCDL 10.0									

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 7=Mechanical, 2=0-7-12, 8=0-7-12
Max Horz 2=106(LC 7)
Max Uplift 7=-73(LC 6), 2=-220(LC 6), 8=-227(LC 16)
Max Grav 7=334(LC 31), 2=896(LC 16), 8=478(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-7=-314/78
WEBS 3-8=-419/287

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 7, 220 lb uplift at joint 2 and 227 lb uplift at joint 8.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 82 lb down and 231 lb up at 2-9-8, 82 lb down and 231 lb up at 2-9-8, and 184 lb down and 81 lb up at 5-7-7, and 98 lb down and 52 lb up at 5-7-7 on top chord, and 2 lb down at 2-9-8, 2 lb down at 2-9-8, and 19 lb down at 5-7-7, and 52 lb up at 5-7-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

REVIEWED FOR DESIGN CRITERIA ONLY

Registered Professional Engineer (Civil) CERTIFICATE NO. 68443 CECIL DYER Date Signed ARIZONA U.S.A. Expires 03/31/2022

December 8,2020

Continued on page 2

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	JC2	MONO GIRDER	1	1	R64673585 Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:53 2020 Page 2
ID:226jLByRO9ycucQLulq_87yB5JS-4fpx7?VWBsd3X0iUl9IJcSIMMjL0bWCb9AHyJDyB4y0

LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 1-4=-100, 4-5=-100, 2-6=-20
Concentrated Loads (lb)
Vert: 10=68(F=34, B=34) 11=-124(F=-19, B=-105) 13=45(F=52, B=-8)

REVIEWED FOR DESIGN CRITERIA ONLY

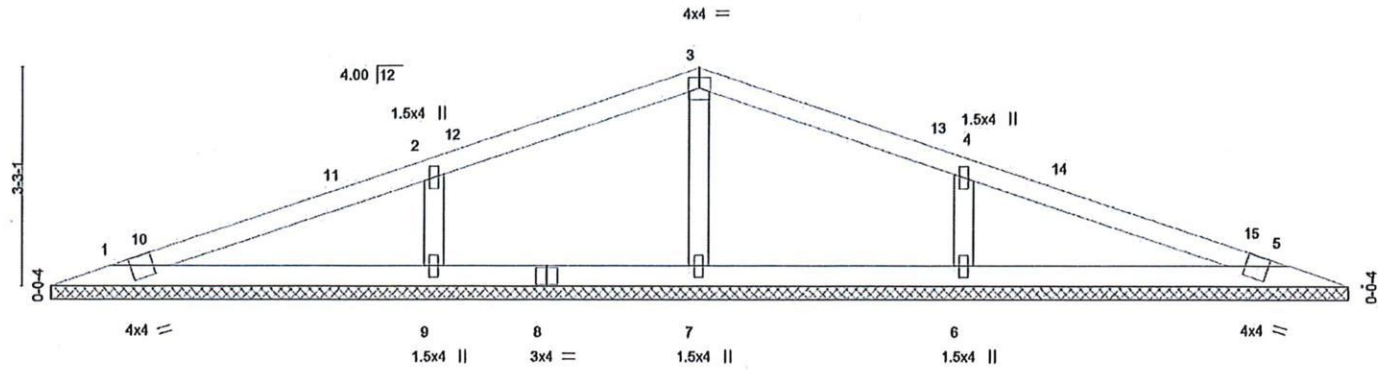
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	V1	DROP GABLE	1	1	R64673586
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:54 2020 Page 1
ID:226jLByRO9ycucQLulq_87yB5JS-ZrNJKLW8y9lw9AHgJsGY9flaf7fMKyolNq1VrfyB4y?

9-9-2 / 9-9-2 | 19-6-4 / 9-9-2

Scale: 3/8"=1'



19-6-4 / 19-6-4

Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	n/a	-	n/a	999	MT20	185/144
(Roof Snow=40.0)		Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-SH							Weight: 51 lb	FT = 10%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 19-6-4.
(lb) - Max Horz 1=-55(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-134(LC 14), 6=-134(LC 15)
Max Grav All reactions 250 lb or less at joint(s) except 1=292(LC 20), 5=292(LC 21), 7=353(LC 1), 9=879(LC 20), 6=880(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-7=-307/69, 2-9=-730/197, 4-6=-730/197

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 4-5-5, Interior(1) 4-5-5 to 9-9-2, Exterior(2R) 9-9-2 to 13-3-2 Interior(1) 13-3-2 to 18-6-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=134, 6=134.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

REVIEWED FOR DESIGN CRITERIA ONLY

Registered Professional Engineer (Civil) CERTIFICATE NO. 68443 CECIL DYER Date Signed ARIZONA U.S.A. Expires 03/31/2022

December 8,2020

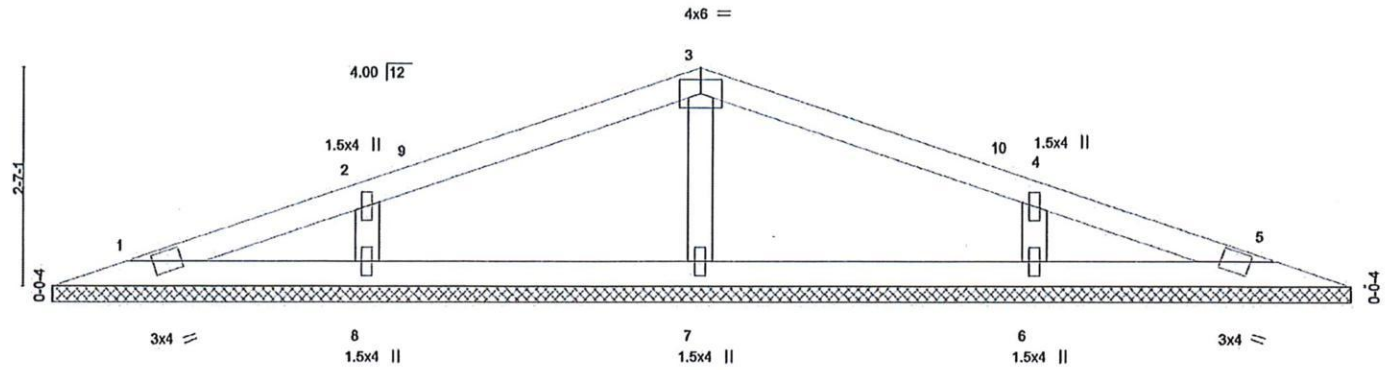
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	V2	DROP GABLE	1	1	R64673587
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:55 2020 Page 1
ID:226jLByRO9ycucQLulq_87yB5JS-12xhYhWmjTtnmKsstannhlrnzW1u3QeucUm3N5yB4y_

7-9-2 | 15-6-4
7-9-2 | 7-9-2

Scale = 1:25.3



15-6-4
15-6-4

Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	n/a	-	n/a	999	MT20	185/144
(Roof Snow=40.0)		Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-SH							Weight: 39 lb	FT = 10%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 15-6-4.
(lb) - Max Horz 1=43(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7 except 8=-104(LC 14), 6=-104(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=435(LC 1), 8=668(LC 20), 6=668(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-7=-355/117, 2-8=-582/198, 4-6=-583/198

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 4-5-5, Interior(1) 4-5-5 to 7-9-2, Exterior(2R) 7-9-2 to 11-3-2, Interior(1) 11-3-2 to 14-6-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 7 except (jt=lb) 8=104, 6=104.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

REVIEWED FOR DESIGN CRITERIA ONLY

Registered Professional Engineer (Civil) CERTIFICATE NO. 68443 CECIL DYER Date Signed ARIZONA U.S.A. Expires 03/31/2022

December 8,2020

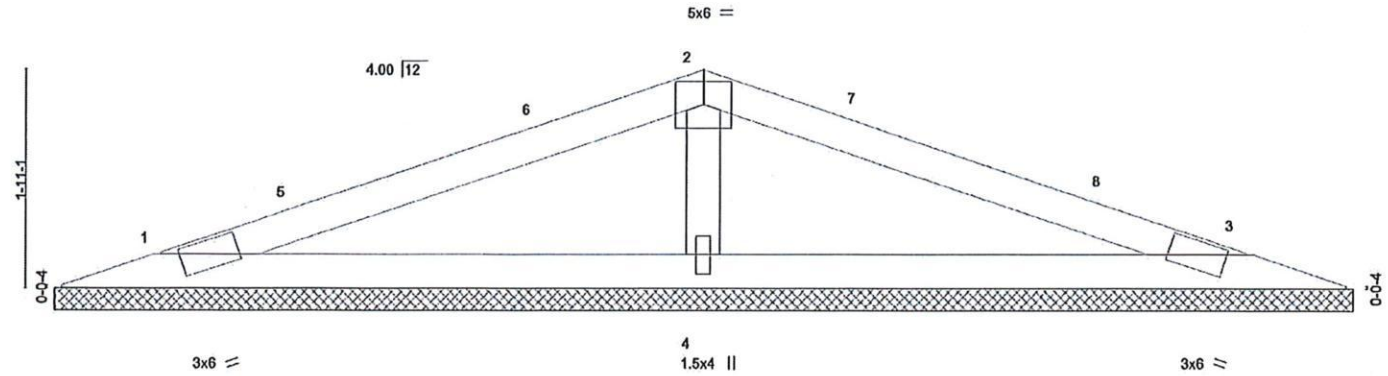
MiTek
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	V3	DROP GABLE	1	1	R64673588
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:56 2020 Page 1
ID:226jLByRO9ycucQLulq_87yB5JS-VEV3I1XOUn0eOUQ3QHI0E4Nv_wJFotD2r8WcvYyB4xz

5-9-2 / 5-9-2 | 11-6-4 / 5-9-2

Scale = 1:18.8



11-6-4 / 11-6-4

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 40.0	Plate Grip DOL 1.15	TC 0.45	Vert(LL) n/a - n/a 999	MT20 185/144
(Roof Snow=40.0)	Lumber DOL 1.15	BC 0.32	Vert(CT) n/a - n/a 999	
TCDL 10.0	Rep Stress Incr YES	WB 0.11	Horz(CT) 0.00 3 n/a n/a	
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-SH		Weight: 26 lb FT = 10%
BCDL 10.0				

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=11-6-4, 3=11-6-4, 4=11-6-4
Max Horz 1=30(LC 14)
Max Uplift 1=-45(LC 10), 3=-48(LC 15), 4=-59(LC 10)
Max Grav 1=351(LC 20), 3=351(LC 21), 4=661(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-468/252

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 4-5-5, Interior(1) 4-5-5 to 5-9-2, Exterior(2R) 5-9-2 to 9-3-2, Interior(1) 9-3-2 to 10-6-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

REVIEWED FOR DESIGN CRITERIA ONLY

Registered Professional Engineer (Civil) CERTIFICATE NO. 68443 CECIL DYER Date Signed ARIZONA U.S.A. Expires 03/31/2022

December 8,2020

MiTek
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 1 Bedroom
105780	V4	DROP GABLE	1	1	R64673589
					Job Reference (optional)

Ballard Truss LLC, Snowflake, AZ - 85937, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:06:56 2020 Page 1
ID:226jLByRO9ycucQLulq_87yB5JS-VEV3I1XOUn0eOUQ3QHI0E4NzmwKxous2r8WcvYyB4xz

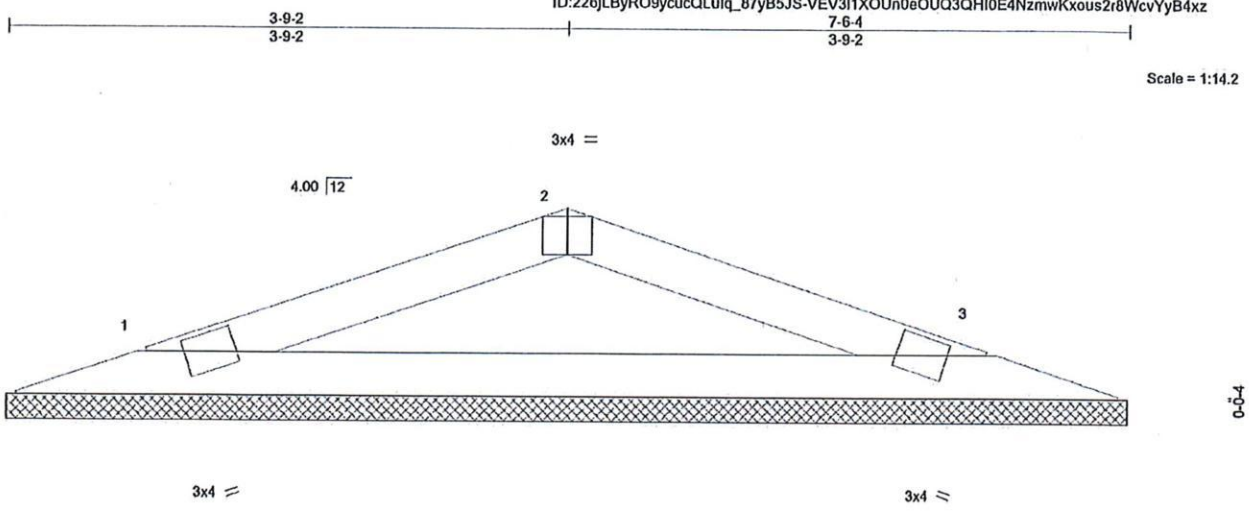


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
(Roof Snow=40.0)		Lumber DOL	1.15	BC	0.28	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P							Weight: 15 lb	FT = 10%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=7-6-4, 3=7-6-4
Max Horz 1=18(LC 18)
Max Uplift 1=-44(LC 10), 3=-44(LC 11)
Max Grav 1=366(LC 20), 3=366(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-476/356, 2-3=-476/361
BOT CHORD 1-3=-296/417

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

REVIEWED FOR DESIGN CRITERIA ONLY

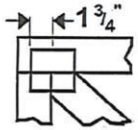
Registered Professional Engineer (Civil) CERTIFICATE NO. 68443 CECIL DYER Date Signed ARIZONA U.S.A. Expires 03/31/2022

December 8,2020

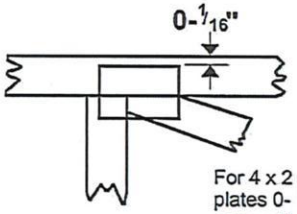
MiTek
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

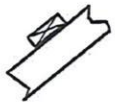
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

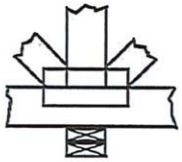
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

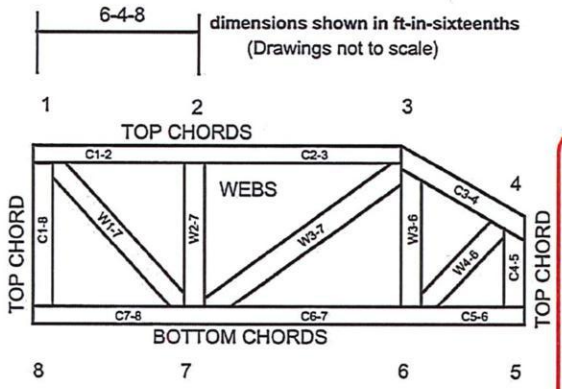


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

MiTek®

MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.